# Commercial generator set Quiet Diesel<sup>™</sup> Series QD 5000



# Cummins Onan

Performance you rely on.™



#### **Features and benefits**

- Lower noise, vibration, harshness (NVH)
- Up to 15 dB(A) quieter than conventional diesel generator sets
- Enclosed muffler for added quietness, easy installation
- Automatic glow plug eliminates preheat time uncertainty
- Self-diagnostic capability simplifies troubleshooting
- Convenient, top-mounted switches and coolant level check/fills
- Complete, integrated package for easy, low-cost installation
- Service and maintenance points accessible through easy-latch side service door

## Weight, size and sound level

Weight: 400 lb (181 kg), wet

**Size:** Length 34.5 in (876.0 mm), width 22.9 in (581.2 mm), height 20.3 in (514.7 mm)

Sound: 68 dB(A) at 10 ft (3 m), before installation, 1/2

load

## **Models and ratings**

Model	Fan	Hz	Watts	Voltage	Amps	PF	Phase	Circuit breaker
5 HDKBC/2860	Internal	60	5000	120	41.7	1.0	1	(1) 2 pole, 25 A
5 HDKBC/2861	Internal	60	5000	120/240	41.7/20.8	1.0	1	(1) 2 pole, 25 A
5 HDKBC/2905	Internal	60	5000	120/240	12.0	1.0	3	(1) 3 pole, 15 A
5 HDKBB/6880	Internal	50	4800	230	21	1.0	1	(1) 2 pole*, 25 A

- Ratings apply to altitudes up to 500 ft (152.4 m), 85 °F (29 °C) ambient\* with No. 2 diesel fuel.
- Maximum power capability decreases 3.5% for each 1,000 ft (305 m) above 500 ft (152.4 m) and 1% for each 10 °F (5.5 °C) increase in ambient\* temperature above 85 °F (29 °C).
- Ratings are intermittent power output. Continuous ratings are 90% of intermittent.
- All 60 Hz and 50 Hz models operate at 2880 r/min.
- \* Ambient is defined as the air temperature measured at the cooling air inlet to the set.
- \* Only one pole is used.

#### Standard features

- 2-cylinder diesel engine
- Brush type alternator
- Digital voltage regulation, no adjustments required
- · Bottom and side air inlet and outlet
- Integral enclosed muffler with stationary exhaust pipe connection point
- USDA approved spark arrestor
- Internal radiator
- Intake silencer
- Replaceable dry element air cleaner
- Maintenance-free electronic governor
- Fused DC circuits
- Battery charging 4 A
- · Hour meter
- Waterproof connector for remote operation
- Focalized mounting system with 3-point vibration isolation
- Over voltage, low oil pressure, over temp, over speed and overload safeties
- Bulkhead type connections for fuel and battery
- Terminal block connection for AC output
- Electric fuel pump
- Fuel filter
- · Full flow oil filter
- Service and maintenance from below or side service access panel
- Automatic timed glow plugs for quick easy start
- Instant one-touch stop

## Average fuel consumption:

No. 2 diesel fuel, Gal/hr (L/hr)	No load	Half load	Full load
5 HDKBC	0.25 (0.95)	0.39 (1.47)	0.60 (2.27)
5 HDKBB	0.20 (0.74)	0.32 (1.23)	0.54 (2.04)

#### Alternator details

**Design:** Cummins Onan, revolving field, AC, 2-pole **Insulation system and temperature rise:** Class H **Exciter system:** Capped, digital voltage regulation

DC brushes: Electrographic; long life

Bearings: Double-sealed pre-lubricated ball bearings

Cooling: Direct drive centrifugal blower

#### **Generator set details**

#### **Control**

- Microprocessor control

**Engine details** 

Model: Kubota Z482

**Bore:** 2.64 in (67 mm)

intermittent

**Stroke:** 2.68 in (68 mm)

Compression ratio: 23:1

Cylinders: 2, inline vertical

**Displacement:** 29.23 in<sup>3</sup> (479 cm<sup>3</sup>)

Lube oil capacity: 2.0 gt (1.9 L)

Starting system: Remote, 12 V

Design: 4-cycle, liquid-cooled diesel engine

Cooling system capacity: 3.0 qt (2.84 L)

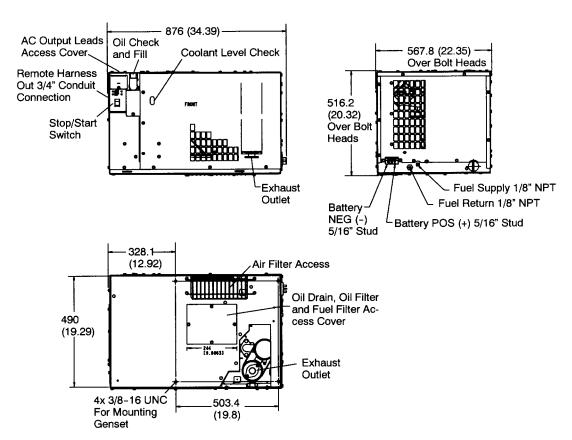
Power (max): At 3000 rpm: 11.1 hp (8.3 kW) SAE net

- Integrated generator set and engine control
- User and service personnel accessible diagnostics
- Fused DC circuits
- Over voltage safety
- Hour meter
- Low oil pressure safety
- Over speed safety
- Overload safety
- Automatic timed glow plugs based on ambient temperature
- One-touch stop

Frequency regulationNo load/Full load+/- 5%Constant load+/- 1%Voltage regulationNo load/Full load+/- 1%Constant load+/- 2%

Dimensions: mm (in)

## **Basic dimensions**



Note: This outline drawing is provided for general reference only and is not intended for design or installation. For more information see Operation and Installation manuals or obtain drawing 500-3634 and wiring diagram from your distributor/dealer.

## **Options and accessories**

- Auxiliary fuel pump kit (P/N 541-0530)
- Remote control panels
  - Switch only (P/N 300-4942)
  - Switch and hour meter (P/N 300-4943)
  - Switch and DC voltmeter (P/N 300-4944)
- Remote harnesses (for use with remote panels): 10 ft (P/N 338-3490-01), 30 ft (P/N 338-3490-02)
- Remote control harness pigtail (P/N 300-4947)
- · Remote control harness pigtail at panel (P/N 338-3573)
- Exhaust adapter, 7 in (P/N 155-2424), 3 in (P/N 155-2610)
- Exhaust elbow, 90° (P/N 155-2982)

## **Testing and standards**

- Tested at extremes of temperature -20 °F (-29 °C) to 120° F (49° C) for starting and operation
- Tested with commercial loads
- Tested in high humidity conditions
- Tested in salt spray conditions
- Tested in heavy airborne dust conditions
- Field test program
- This product meets U.S. EPA Tier IV
- This generator set was designed and manufactured in facilities certified to ISO 9001
- CSA certified for CSA C22.2 std 100 and std 14







## Warranty policy

The Cummins Onan limited warranty covers virtually everything except routine maintenance for the first two years you own your generator set, or the first 2,000 hours of operation, whichever comes first. In addition, it includes a free 90-day adjustment policy, which provides that Cummins Inc. will make minor adjustments to your new generator set during the first three months you own it - free of charge!



#### **WARNING:**

Do not use this generator set on a boat. Such use may violate U.S. Coast Guard regulations, and can result in severe personal injury or death from fire, explosion, electrocution, or carbon monoxide poisoning.



Back feed to a utility system can cause electrocution and/or property damage. Do not connect to any building electrical except through an approved device or after building main breaker is open.

### After sale support

### Largest distributor/dealer support network

Cummins Onan generator sets are supported by the largest and best trained worldwide certified distributor/dealer network in the industry. This network of knowledgeable Cummins Onan distributor/dealers will help you select and install the right generator set and accessories to meet the requirements of your specific application. This same network offers a complete selection of commonly used generator set maintenance parts, accessories and products plus manuals and specification sheets. Plus, they can answer your questions regarding proper operation, maintenance schedules and more.

**Manuals:** Operation and installation manuals ship with the generator set. To obtain additional copies or other manuals for this model, see your Cummins Onan distributor/dealer and request the following manual numbers: Operation (981-0167), Installation (981-0634), Parts (981-0273), Service (981-0535).

To easily locate the nearest Cummins Onan distributor/dealer in your area, or for more information, contact us at 1-800-888-6626 (or 763-574-5000), or visit www.cumminsonan.com.

## Contact your distributor/dealer for more information



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